

Claims

1. (currently amended) A device Device for temporal slaving in a packet data transmission network, the device receiving packets, wherein each incoming data packet comprises a time label, the device comprising:
 - a local reception clock, where each incoming data packet comprises a time label;
 - a means of temporary storage for receiving packets from said network, and said storage having a storage capacity for recording data received for a predetermined time (IPDV), said storage capacity dependent on characteristics of the network,
 - a means for regenerating a local reception clock as a function of the time label labels of the incoming packets,
 - a means for reading the data in the means of temporary storage at an instant dependent on the said predetermined time (IPDV) and on the regenerated local reception clock;

wherein the means for regenerating a local reception clock comprises

 - a differentiator for calculating a difference between the time label labels and the regenerated local reception clock,
 - a means for accumulating said difference differences between the time labels of the incoming data packets and the local reception clock during a period of time and
 - a decision means for comparing the said summing said accumulated differences and the local clock and modifying the regenerated local reception clock according to said comparison.
- 2. (previously presented) Device according to Claim 1, wherein the means of reading the data in the means of temporary storage are adapted for reading the data in the means of temporary storage when the difference between the said predetermined time and the regenerated local clock is greater than the value of the time label of the next packet to be output from the means of temporary storage.

3. (cancelled)

4. (currently amended) Device according to claim 1 wherein it comprises additionally comprising a means of reducing the convergence time on start-up.

5. (currently amended) Device according to claim 1 wherein it comprises additionally comprising a means of reducing the phase noise.

6. (currently amended) Device according to Claim 4, wherein the means of reducing the phase noise comprises a digital low-pass filter.

7. (currently amended) Device according to claim 1 wherein it comprises additionally comprising a means of generating artificial noise.

8. (currently amended) Method of temporal slaving in a device of a packet data transmission network, each data packet comprising a time label, said device comprising a local reception clock the said method comprising a step of temporary storage of the packets received from the said network

the data being stored for a predetermined time dependant dependent on the characteristics of the network,

a step of regenerating a local reception clock as a function of the time label labels of the incoming packets,

a step of reading the data in the means of temporary storage at an instant dependent on the said predetermined time and on the regenerated local reception clock.

wherein during the regenerating step;

one makes calculating the a difference between the time label and the regenerated local reception clock,

one accumulates said difference accumulating differences
between the time labels of the incoming data packets and the local
reception clock during a period of time; (Tupdate) and
one compares comparing the said summing and the local
reception clock and modifies modifying the regenerated local reception
clock according to said comparison.